

OBJECTIVES: Time tradeoff (TTO) values of the EQ-5D-5L health states measured in China's EQ-VT study varied across sampled locations. This might be a sign of different health preferences in those locations, or it might be a sign of salient interviewer effects or respondent's differing understanding of the TTO task. Task understanding could be assessed in terms of individual-level inconsistency in valuation. Relating inconsistency to the characteristics of the respondent, interviewer, and interview can therefore help to understand the variations in values. **METHODS:** 20 Interviewers interviewed 1,296 respondents and each respondent valued 10 health states using the EQ-VT (TTO) protocol in 5 cities in China. At the respondent level, inconsistency in valuation was assessed in terms of severity and quantity and was then related to respondent's background characteristics, interviewer identity, and performance of TTO tasks and the data that related to the 'wheelchair example' which is used to train the respondent. An Ordered logistic regression were used for statistical analysis. **RESULTS:** In the full dataset, no relation between respondent's education and inconsistency was found, nor did a relation between location and inconsistency exist. However, we did find a positive association between time spent on TTO tasks and inconsistency and a negative association between time spent on the wheelchair example and inconsistency. In addition, respondents interviewed by one particular interviewer were found to be highly inconsistent. After excluding the data collected by this interviewer, the remaining 19 interviewers were similar in the inconsistency level, and the relation between interview process and inconsistency was stronger. **CONCLUSIONS:** Inconsistency strongly related to interviewer and then to interview process, but has limited association with respondents' background variables. This result, in turn, suggests that the variance in values between locations is not due to differences in understanding the task, but possibly due to different health preferences.

PIH32

JAPANESE POPULATION NORMS FOR PREFERENCE-BASED MEASURES: EQ-5D-3L, EQ-5D-5L, AND SF-6D

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OBJECTIVES: The purpose of this study was to measure the population norms for the Japanese versions of preference-based measures (EQ-5D-3L, EQ-5D-5L and SF-6D). We also considered the relations between QOL score in the general population and socio-demographic factors. **METHODS:** Data in this study came from Ministry of Health, Labour and Welfare (MHLW) survey, which took a representative sample. A total of 1,143 adult respondents (aged ≥ 20 years) were randomly sampled from across Japan using data from the Basic Resident Register. The health status of each respondent was measured using the EQ-5D-3L, EQ-5D-5L, and SF-6D, and responses regarding socio-demographic data as well as subjective diseases and symptoms were obtained. The responses were converted to a QOL score using Japanese value sets. **RESULTS:** The percentages of respondents with full health scores were 68% (EQ-5D-3L), 55% (EQ-5D-5L), and 4% (SF-6D). The QOL score measured using the SF-6D was significantly lower than those measured using either EQ-5D score. The QOL score was significantly lower among respondents over the age of 60 years, those who had a lower income, and those who had a shorter period of education. Intraclass correlation coefficient (ICC) showed a poor agreement between the EQ-5D and SF-6D scores. The differences in QOL scores between respondents with and those without any disease were 0.064 for the EQ-5D-3L, 0.061 for the EQ-5D-5L, and 0.073 for the SF-6D; these differences are regarded as minimal important differences (MID) in the general population. **CONCLUSIONS:** The Japanese population norms of three preference-based QOL measures were examined for the first time. Such information is useful for economic evaluations and research examining QOL score.

PIH33

UTILITY VALUES FOR HEALTH TECHNOLOGY ASSESSMENT: LEARNING LESSONS FROM ECONOMIC MODELS OF PHARMACEUTICALS SUBMITTED TO THE FRENCH NATIONAL AUTHORITY FOR HEALTH (HAS)

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OBJECTIVES: Economic evaluation of pharmaceuticals and medical devices has been introduced in France in October 2013. Economic evaluations by HAS are based on critical appraisals of manufacturers' submissions. We reviewed the selection and use of health utility values for cost-utility analyses (CUA) submitted to HAS. **METHODS:** A review of manufacturers' CUA submitted to and assessed by HAS by end of May 2015 was undertaken to review the identification and selection of data and the methods used for deriving utility estimates. The methods used were compared with those recommended in the HAS methodological guideline on economic evaluation. **RESULTS:** Of the 27 submissions, 16 (56%) included utility values from previously published studies, only 4 of which reported a systematic literature review; 10 (37%) from the clinical trials informing the clinical effectiveness; 2 (7%) from a mixture of sources. To describe health states, 21 (78%) submissions used a preference-based generic instrument, mostly the EQ-5D; 5 (19%) used vignettes; 3 used a condition-specific instrument. Several submissions used different types of instrument. In most (85%) submissions, the valuation method was the time-trade off. The valuation perspective was the general population in 23 (85%) submissions; in only 5 (19%) submissions, the valuation set was derived from the French general population. In 14 (52%) submissions, further adjustments to utility values were made, mostly to account for adverse events. **CONCLUSIONS:** We identified numerous concerns in the selection, valuation and use of utility values, and a frequent lack of clarity in the description of the methods used. Many submissions included utility values that did not meet the HAS reference case for economic evaluation. There is a need to strengthen early

dialogues between manufacturers and HTA bodies to generate robust utility data. Economic evaluation of pharmaceuticals in France will follow a learning curve for both the manufacturers and for HAS.

PIH34

VALUATION OF EQ-5D HEALTH STATES BY PHARMACY STUDENTS IN POLAND (COMPARISON OF DIFFERENT METHODS AND WITH GENERAL POPULATION)

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OBJECTIVES: Since 2010, there has been established a Polish EQ-5D value set using the time trade-off (TTO) method. Pharmacy students gain a professional knowledge on health problems and treatment during their education. The aim of this study was to assess how do medical students value health on the EQ-5D compared with the general population and with the use of different methods of direct measurement of preferences. **METHODS:** 135 students of the 5th year of pharmacy of the Wroclaw Medical University took part in the face to face interview. Students were asked to assess randomly selected 5 out of 243 hypothetical EQ-5D-3L health states. Visual analogue scale (VAS), TTO and standard gamble (SG) were used. Responses indicating the misunderstanding of the task have been removed. **RESULTS:** We obtained 664 useable valuations. No health state has been valued as worse than death. Appropriate additive models have been built: for VAS (with all coefficients statistically significant, R2 equal to 0.488, and the worst possible health state valued as 0.089), for TTO (with all coefficients statistically significant except for constant and UA2, R2 equal to 0.292, and the worst possible health state valued as 0.540) and for SG (with all coefficients statistically significant except for constant and AD2, R2 equal to 0.196, and the worst possible health state valued as 0.582). With the use of TTO, almost all health states were valued higher by the pharmacy students compared to data of the general population. **CONCLUSIONS:** Pharmacy students have a tendency to value health states higher than the general population. The valuation highly depends on the method used.

PIH35

A NATIONAL EQ-5D VALUE SET FOR HUNGARY - A MODEL METHODOLOGY ?

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OBJECTIVES: To develop a set of weights for EQ-5D-3L health states based on the values of a representative sample of the Hungarian population. **METHODS:** A national population survey (n=5,503) containing self-reported health status were analysed to identify respondent's EQ-5D-3L health state. The survey also included a visual analogue scale (VAS) rating of the respondent's health on a 0-100 scale. Mean VAS rating for each observed EQ-5D-3L state were computed, yielding an average value for each "naturally" occurring EQ-5D health states. OLS regression yielded a well-behaved set of coefficients representing the value loss for each problem level/dimension. This estimation model was then applied to create a value set for all 243 EQ-5D-3L health states. **RESULTS:** The most frequently reported health state was 11111 (48.6%) with a mean VAS rating of 82.5. The worst health state was rated at 25.4, representing a somewhat compressed range of values. Logically consistent coefficients for all 5 dimensions revealed largest value losses for Pain/Discomfort and Anxiety/Depression level#3. Self-care level#2 produced the smallest value loss. Values for all 243 health states were estimated using the derived value loss function. The value for dead generated in the European BIOMED was used to transform these estimated values onto a 0-1 format suitable for use in QALY calculations. **CONCLUSIONS:** In common with other countries, many Hungarian analysts use the UK MVH value set as a stop-gap. This expedient provides a means of satisfying the requirements for QALY calculations but risks compromising the principle that social decision-maker should use values of the relevant population. Substitution of UK values may be empirically unsound. An alternative value set for EQ-5D-3L based on data from national Hungarian sources is now available, providing a robust counter-factual for comparative analysis.

PIH36

TIME TRADE-OFF UTILITY VALUES IN MILD AND SEVERE PRIMARY DYSMENORRHEA

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OBJECTIVES: To evaluate health state utility values in mild and severe primary dysmenorrhea (PD) in patients and controls. **METHODS:** A convenience sample of female university students and staff was invited to participate in a web-based survey. Inclusion criteria to the study were: i) aged 18 to 40 years; ii) nulliparous and not pregnant at the time of the survey; iii) having menstrual periods; and iv) no pelvic pathology. Subjects reporting a history of menstrual cramps with an onset of >20 years of age were excluded. Participants with pain intensity of >3 on an 11-point numeric rating scale were classified as patients, whereas those without history of menstrual cramps or with pain intensity of ≤ 3 were considered as controls. The 10-year time trade-off was applied to assess utilities for two hypothetical PD health states characterised by menstrual cramps and associated symptoms. **RESULTS:** Altogether 556 adults were completed the questionnaire with mean age of 23 ± 3.5 years. Of these, 399 (72%) reported symptoms of PD and 157 (28%) were grouped as controls. Overall 19%, 49% and 32% had mild, moderate or severe PD based on the verbal multidimensional scoring system for assessment of dysmenorrhea severity. Mean utilities for the mild and severe hypothetical health states were 0.97 ± 0.14 and 0.88 ± 0.24 , $p < 0.001$. Compared to the control group, PD patients attached significantly lower utilities to the mild health state (0.96 vs. 0.99, $p = 0.011$) but not to the severe (0.86 vs. 0.90, $p = 0.420$). **CONCLUSIONS:** This study provides the first utility values in PD. Disutility experienced in PD – ranging between 0.01 and 0.14 depending on severity and the group who valued them – is definitely not negligible. Severe PD may have a similar impact on utilities as living with chronic migraine. Utilities evaluated in this study can be used as inputs for cost-effectiveness analyses of health interventions.